Status Report:
Implementation of the 2005 ARB/Railroad Statewide Agreement

January 27, 2006

8:30 a.m.

California Environmental Protection Agency

Air Resources Board

Overview of Presentation

- Statewide Strategy
- Overview of the Agreement
- Clarifications
- Progress Report
- Moving Forward
- Summary and Recommendation

STATEWIDE STRATEGY FOR RAIL

Locomotive/Rail Yard Strategy

- Integrated effort
  - Mutual agreements
  - State regulations
  - Incentive programs
  - National rulemaking for Tier 3 locomotives
- Part of Governor's Goods Movement Action Plan

Statewide Railroad Strategies

- 1998 South Coast NOx MOU
- 2004 Clean diesel fuel for captive locomotives
- 2005 Statewide Agreement
- 2005 Cargo handling rule
- 2007 National “Tier 3” locomotive standards
- Tbd Accelerated locomotive turnover
- 2010 Replacement of aged CA switcher fleet

Potential Funding Mechanisms

- **Carl Moyer Program**
  - 10% set aside for goods movement
- **Proposed $1 billion bond**
  - Potential use of $225 million to clean up switcher fleet through cost share

Overall Emissions Goal

- Greater than 90% reduction in diesel PM and NOx by 2020
- Localized risk reduction

OVERVIEW OF THE AGREEMENT

Specific Elements

- Limit non-essential idling
- Install anti-idling devices
- Use ultra-low sulfur diesel fuel
- Identify and repair smoking locomotives
- Conduct health risk assessments
- Design risk mitigation measures
- Evaluate future technologies on locomotive control and remote sensing

Specific Elements, Con't

- **Binding on railroads**
  - Process to remedy performance problems
- **Penalties for failure to implement**
  - Up to $40,000 per month
- **Arbitration and adjudication process**

Community Involvement

- Responsive system to report idling/smoking locomotives established
- Community involvement tailored to unique aspects of each yard and neighborhood
- Numerous opportunities for community involvement in HRA process and mitigation efforts

Release Clause

- Agreement contains a provision to release railroads from individual elements under specific conditions
- Railroads can opt to continue the element in other areas of State
- Other elements remain in force

CLARIFICATIONS OF THE AGREEMENT

Purpose of the Clarifications

- How release clause operates and when it may be triggered
- How the Agreement affects the use of preexisting state and local authority
- Clarifications do not modify Agreement

Use and Timing

- Release clause is discretionary in every case
- The release clause is:
  - Not applicable to proposals or pending requirements
  - Only triggered on date requirement adopted or enforced

General Savings Clause

- State and local regulatory authority not affected
- Federal preemption not affected
- Does not modify or terminate any previous agreements

Events that Could Trigger Release Clause

- ARB adopts a new or modified regulation
- Local air district or government adopts a new or modified regulation
- U.S. EPA adopts or attempts to enforce more stringent requirements
- State legislature enacts and Governor signs self-implementing statute

Events that Would Not Trigger the Release Clause

- Enforcement under pre-existing authority
- Existing agreement(s)
- New voluntarily agreement(s)
- Permit conditions or CEQA mitigation requirements

Clarifications Recap

- Preserves existing authority/enforcement
- Keeps voluntary agreements in place
- No interference with CEQA mitigation

EMD SD70ACe – EPA Tier 2

Green Goat Electric-Hybrid Switch Locomotive

PROGRESS REPORT

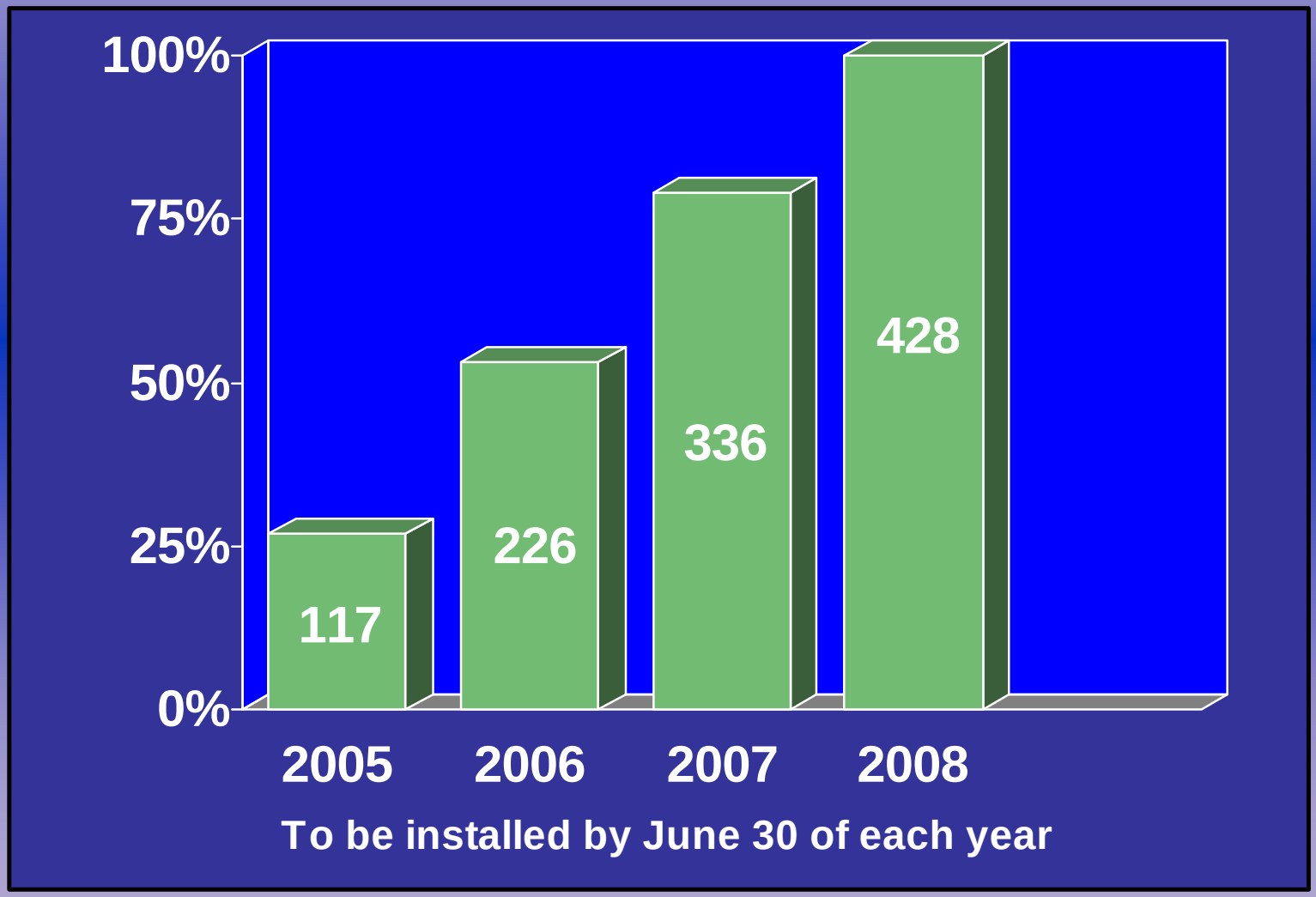
Overall Status

- Program elements are being implemented according to schedule
- All data submittals have been received on-time
- Community meetings were delayed but are scheduled to be completed this spring

Idling Reduction Program

- Submitted inventories
- Developed community reporting processes
- Established training programs & materials
- Submitted implementation plans
- Begun idle reduction device installation

Idle Reduction Devices on California locomotives



California is Ahead of the Nation on Switcher Retrofits

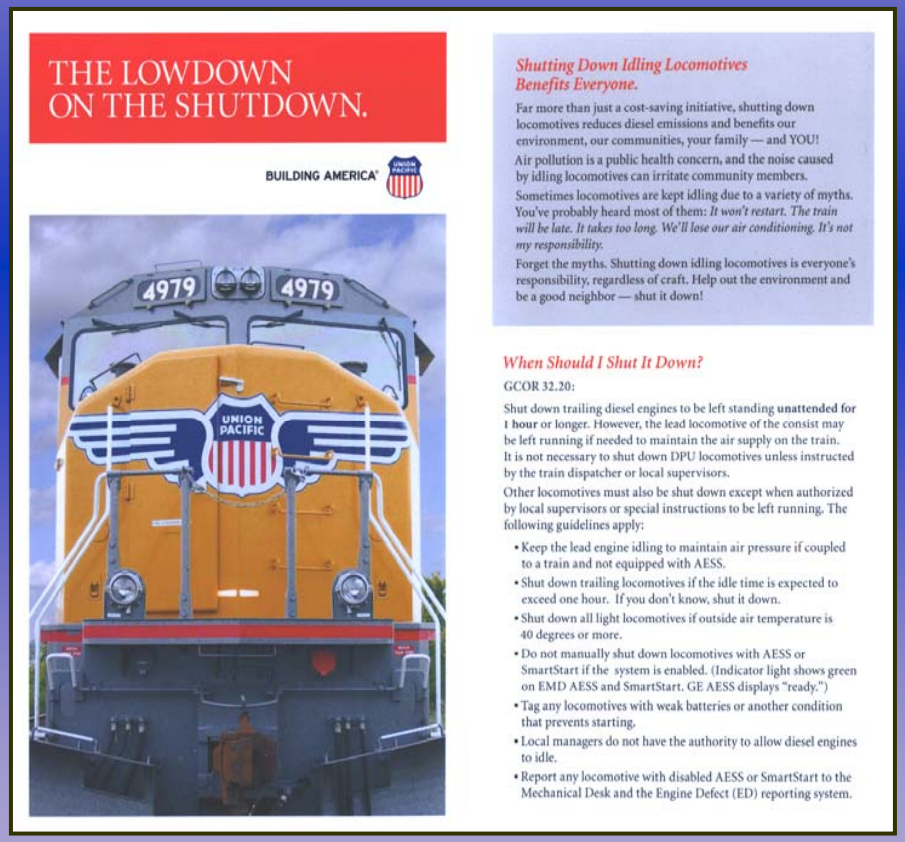
- National: 15%
- California: 32%

Visible Emission and Reduction and Repair Program

- Appointed program coordinators
- Developed community reporting processes
- Submitted program plans and begun training
- 2006 annual program review in April

Railroad Visible Emission & Idling Reduction Training

- Over 3,000 employees by January 31, 2006.
- Additional 6,000 employees to be trained by June 30, 2006.



THE LOWDOWN ON THE SHUTDOWN.

BUILDING AMERICA®

4979 4979

UNION PACIFIC

Shutting Down Idling Locomotives Benefits Everyone.

Far more than just a cost-saving initiative, shutting down locomotives reduces diesel emissions and benefits our environment, our communities, your family — and YOU!

Air pollution is a public health concern, and the noise caused by idling locomotives can irritate community members.

Sometimes locomotives are kept idling due to a variety of myths. You've probably heard most of them: *It won't restart. The train will be late. It takes too long. We'll lose our air conditioning. It's not my responsibility.*

Forget the myths. Shutting down idling locomotives is everyone's responsibility, regardless of craft. Help out the environment and be a good neighbor — shut it down!

When Should I Shut It Down?

GCOR 32.20:

Shut down trailing diesel engines to be left standing **unattended for 1 hour** or longer. However, the lead locomotive of the consist may be left running if needed to maintain the air supply on the train. It is not necessary to shut down DPU locomotives unless instructed by the train dispatcher or local supervisors.

Other locomotives must also be shut down except when authorized by local supervisors or special instructions to be left running. The following guidelines apply:

- Keep the lead engine idling to maintain air pressure if coupled to a train and not equipped with AESS.
- Shut down trailing locomotives if the idle time is expected to exceed one hour. If you don't know, shut it down.
- Shut down all light locomotives if outside air temperature is 40 degrees or more.
- Do not manually shut down locomotives with AESS or SmartStart if the system is enabled. (Indicator light shows green on EMD AESS and SmartStart. GE AESS displays "ready.")
- Tag any locomotives with weak batteries or another condition that prevents starting.
- Local managers do not have the authority to allow diesel engines to idle.
- Report any locomotive with disabled AESS or SmartStart to the Mechanical Desk and the Engine Defect (ED) reporting system.

Visible Emission Inspections in 2005

- Over 16,000 opacity inspections performed in 2005

Opacity Meter	200
U.S. EPA Method 9	10,410
Screening Inspections	5,410
Total Inspections	16,020

ARB Enforcement

- Enforcement training required
- Training to be complete by February

Other Activities

- Meetings with air districts
- Rail yard visits
- Updated ARB rail yard webpage

Air Resources Board

City of Commerce

This page updated January 12, 2005.

There are four railyards in the City of Commerce. Three belong to BNSF and one to UPRR. This page provides an overview of the activities in the communities around the rail yards and additional communities' information.

1. BNSF Commerce Diesel Maintenance Facility (Sheila)

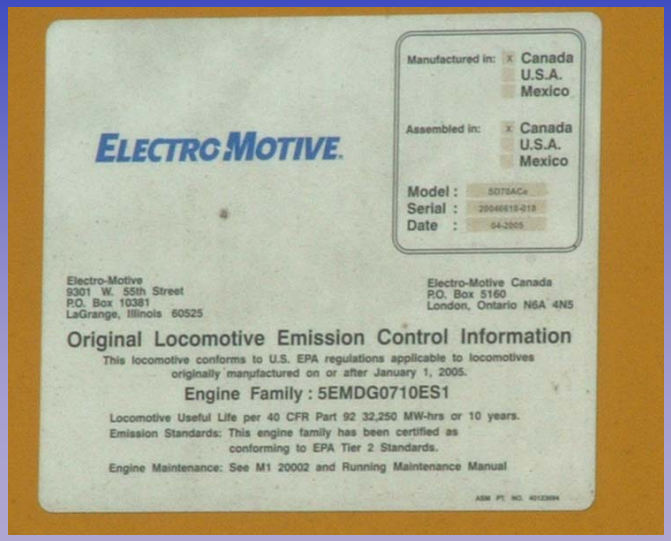
- Address: 6300 Sheila St, Commerce, CA 90040
- Description: Facility size: 33 acres, opened 1997.
- Aerial Map

Enlarge View

- Program Coordinator:
  - *Idling*: Julian Sanchez - Phone: (323) 869-3000
  - *Visible Emission*: Julian Sanchez - Phone: (323) 869-3000
- Health Risk Assessment: Not complete
- Early Mitigation Plan (PDF-26k)

Emission Mitigation Efforts

- **For each Designated Yard, we've received:**
  - **Early emission inventory**
  - **Potential mitigation measures**



Emission Mitigation Efforts, Con't

- **Low-emission locomotives**
  - 2 Green Goats delivered to Mira Loma in 2005; 8 more on order
  - 1 Gen-set switcher delivered to Commerce
  - Bids being sought for about 60 more

Health Risk Assessments (HRAs)

- Guidelines being developed
- Public comment
- Draft HRAs by:
  - December 31, 2006 for the first 9 yards
  - December 31, 2007 for the next 7 yards

Technology Assessments

- 2 switchers to be retrofitted with DPFs in 2006
- Staff assessing European experience
- Public meetings in Spring 2006

Remote Sensing Assessment

- Initiated locomotive remote sensing pilot program (AB 1222–Jones)
- Kick-off meeting held January 17, 2006
- Study plan being developed
  - Testing to begin late spring
  - Report to Legislature due end of year

Multi-Nonroad Engine Switch Locomotive

Green Goat Electric-Hybrid Switch Locomotive

EMD EPA Tier 2 Switch Locomotive

Moving Forward

Community-Based Activities

- Local Community Meetings (Spring 2006)
  - Identify local community concerns
  - Discuss possible mitigation measures
- Begin health risk assessments
  - Review Draft HRA Guidelines – February 2006
  - Complete study plans – Spring 2006
  - Complete first set of draft HRAs - December 2006
- Emission Reduction Technology Meeting - Spring 2006

Other Activities

- ARB enforcement training
- Program reviews on effectiveness
- Evaluate future technologies
- Faster Freight/Cleaner Air Conference
- Strategic use of public funding

Goods Movement: Emissions Reduction Strategy

- Before Board in April 2006
- Comprehensive list of measures
  - Regulatory Actions
  - Incentive Programs
  - Lease agreements
  - Careful land use decisions
  - Voluntary actions
- Address all significant sources of emissions

Summary and Recommendation

Summary

- Clarified Statewide Agreement
- Implementation on schedule
- Additional emission reductions possible
- Bonds and other incentive funds can accelerate progress

Recommendation

- Leave the Agreement in place

Rail Yard Diesel PM Emission

Sources	EMISSIONS By 2010 (tpy)			
	2005 (Base)	2010	% Reduction	Strategy
Through Trains	10	5	50%	98 MOU
Switcher Locomotives	7	0.7	90%	98, 05 MOU, CARB Diesel
Loco Refueling	2	0.5	75%	98, 05 MOU
Cargo Equipment	34	13.6	60%	ARB Rule
Container Truck	7	0.7	90%	Bond Funding
Total	**60**	**20**	**65%**	